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A Mixed Methods Study of Medical School Admissions: Issues of Fairness and Predicting Student Performance (0239)

Medical schools in the United Kingdom are faced with the difficult task of selecting students to fill limited places on medical programmes. In recent years, record numbers of students achieved the highest possible A level grades, making the selection process even more difficult (Harrison 2011). Interviews and personal statements have become widely accepted measures to supplement student academic records (Parry, Mathers et al. 2006). Such methods are usually considered useful in assessing personal qualities, but have been criticised for their perceived lack of reliability and validity (Norman 2004; British Medical Association 2009).

Another problem is that students from private schools and higher social classes are overrepresented in higher education institutions (McDonald, Newton et al. 2000; The Sutton Trust 2008), and medical schools in particular (Nisbet 2006; The Panel on Fair Access to the Professions 2009; Shephard 2011). While private schools educate about 7% of the population of school children, privately educated students represent roughly 50% of the medical student population (The Sutton Trust 2008; The Panel on Fair Access to the Professions 2009). Privately educated students are more likely to apply to medical school, however research suggests they also have better chances of being offered a place (The Sutton Trust 2008; Arulampalam, Naylor et al. 2011), arousing suspicion that these students also have an advantage on non-academic selection methods.

To address the challenges of high demand and a need to increase diversity, 26 medical schools in the UK have introduced an aptitude test called the United Kingdom Clinical Aptitude Test (UKCAT). Developed by Pearson VUE, (UKCAT Board[1] 2008) the UKCAT is intended to predict medical school performance and to measure a student's aptitude regardless of previous schooling. Thus, the test may improve the odds of obtaining a medical school place for students who had limited support in preparing their application, but have great potential to complete a degree at university. The cohort entering medical school in the academic year 2007-2008 was the first to take the UKCAT, consisting of four sections: quantitative reasoning, decision analysis, verbal reasoning and abstract reasoning. However, some argue that the £60 fee to take the UKCAT will be a deterrent for poorer students, adding another barrier in the struggle to gain a place at medical school (Cassidy 2008). Others suggest that A levels are the best predictors of university performance, and that aptitude tests add little value to the admissions process (McManus, Smithers et al. 2003; McManus, Powis et al. 2005).

Purpose of the Study

The purpose of the study was to measure the relationships between background factors and admissions scores to determine if particular groups of students were advantaged or disadvantaged by the admissions policy at Newcastle University. Another purpose was to determine whether the selection methods used were predictive of first and second year medical school examination performance. The study also investigated whether there are other, less quantifiable factors which affected admissions and medical school performance.

Methodology

A mixed methods approach was adopted, using a sequential explanatory design; quantitative analysis was carried out first, resulting in additional research questions that were addressed through qualitative methods. Quantitative methods mainly consisted of multiple regression analyses. 'Framework' was the approach used to organise and analyse the qualitative dataset (Ritchie and Spencer 1994). Bourdieu's concepts of capital, field and habitus were used as a theoretical framework assisting in the interpretation of the results (Webb, Schirato et al. 2002).

Results

Quantitative

Personal statement performance was predicted by school type; students from private schools performed significantly better than state school students. However, personal statements were not predictive of medical school examination scores. School type did not predict interview performance, nor did interview performance predict examination performance. School type did not predict UKCAT performance; however UKCAT performance was a significant predictor of medical school examination performance. The predictive ability of the UKCAT was stronger for earlier examinations than it was for examinations given at the end of the second year of medical school.

Qualitative

Students described the support available from their schools, families and social contacts when preparing for the medical school application process. Privately educated students consistently described having higher levels of access to various forms of capital (economic, social and cultural) compared to state school students. These forms of capital were useful in helping students to decide to apply to medical school, knowing application requirements, securing work experience, writing personal statements and preparing for interviews. Students from private schools described being comfortable with their own suitability for medical school, while state school applicants described feelings of uncertainty, especially at the time of application.

Students described a range of factors that could have affected their medical school performance. Prominent themes included motivation, adjusting to university life and being good at a particular assessment style. However, these factors were unique to the individual; highlighting some of the difficulties incurred with attempting to predict student performance, and bringing into question whether it is realistic to do so.

Implications

The results of this study illustrate the unequal playing field that exists for medical school applicants from state and private schools. While medical schools endeavour to create a fair and transparent admissions policies, students who have access to economic, social and cultural capital are unintentionally favoured by the current selection methods. Students who have less access to such forms of capital are at a disadvantage, particularly when it comes to writing personal statements and securing work experience. The results of this study only include those who were successful at obtaining a medical place; meaning there are likely other students who are capable of studying medicine but who did not have adequate support in preparing for the admissions process.   The

results of this study come at a particularly troublesome time given simultaneous tuition fee increases and funding cuts to widening participation initiatives, career services and mentoring schemes (Richardson 2011). While the UKCAT has been subject to criticism (Cassidy 2008), the results of this study found it to be the least biased and most useful selection tool used at Newcastle University.

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